

FIG. 1

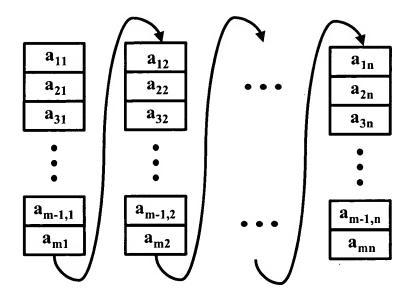


FIG. 2

Row-oriented algorithm:

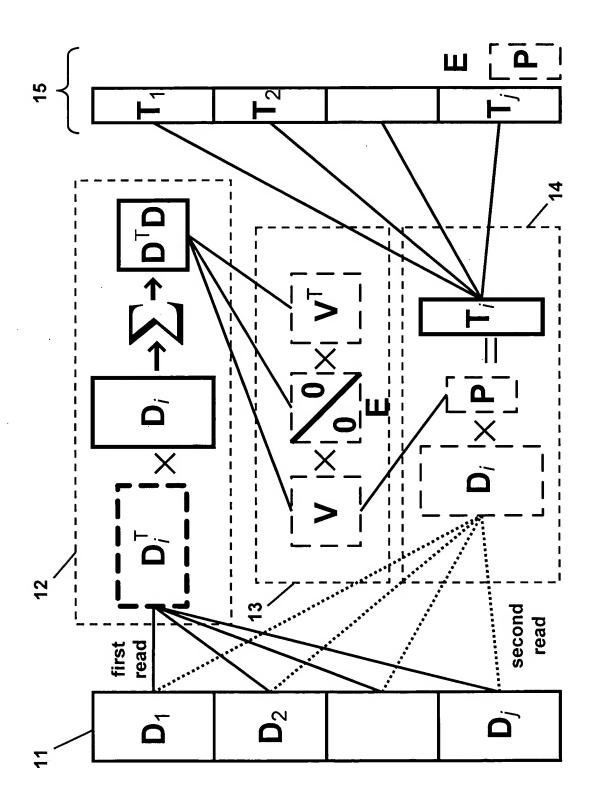
```
nrows = 32768; ncolumns = 1024;
A = rand(nrows, ncolumns);
B = zeros(size(A));
v = rand(1, ncolumns);
tic, for j = 1:nrows
   B(j,:) = A(j,:).* v;
end, toc
```

Column-oriented algorithm:

```
nrows = 1024; ncolumns = 32768;
A = rand(nrows, ncolumns);
B = zeros(size(A));
v = rand(nrows, 1);
tic, for j = 1:ncolumns
   B(:,j) = A(:,j).* v;
end, toc
```

FIG. 3





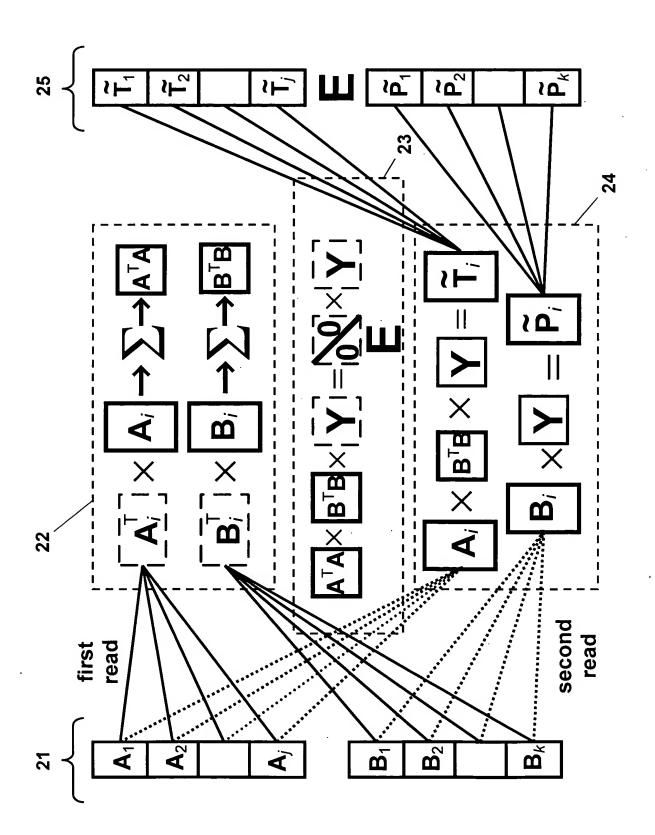


FIG. 5

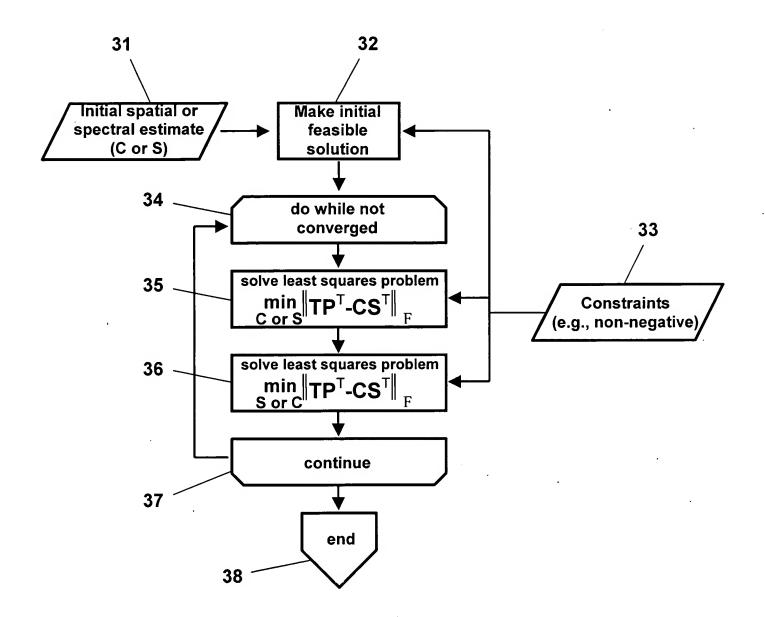


FIG. 6

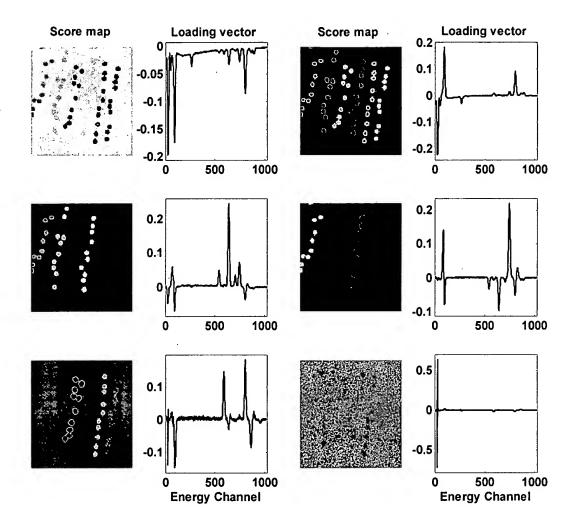


FIG. 7

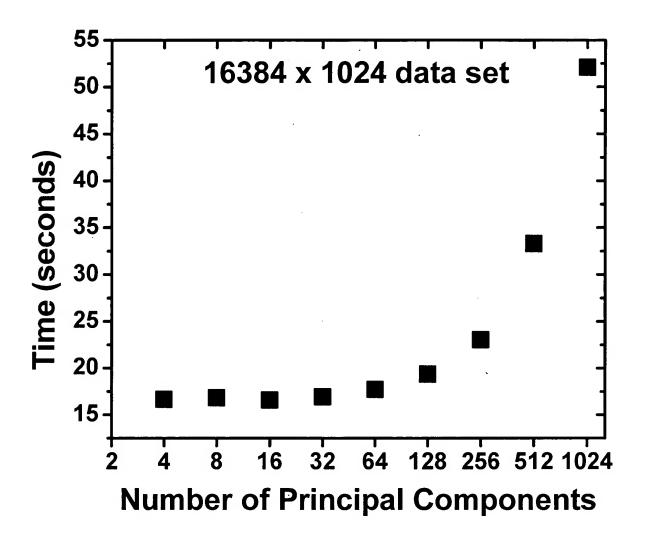


FIG. 8

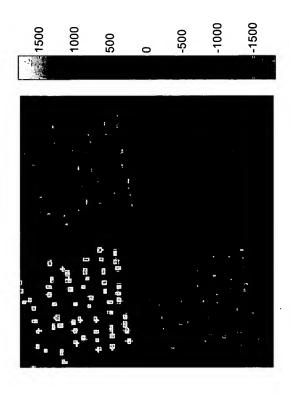


FIG. 9B

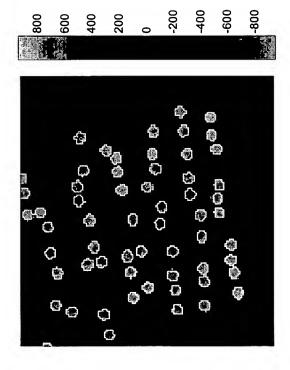
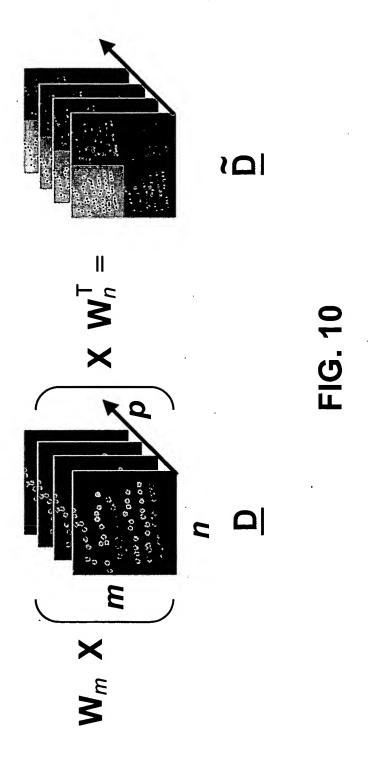
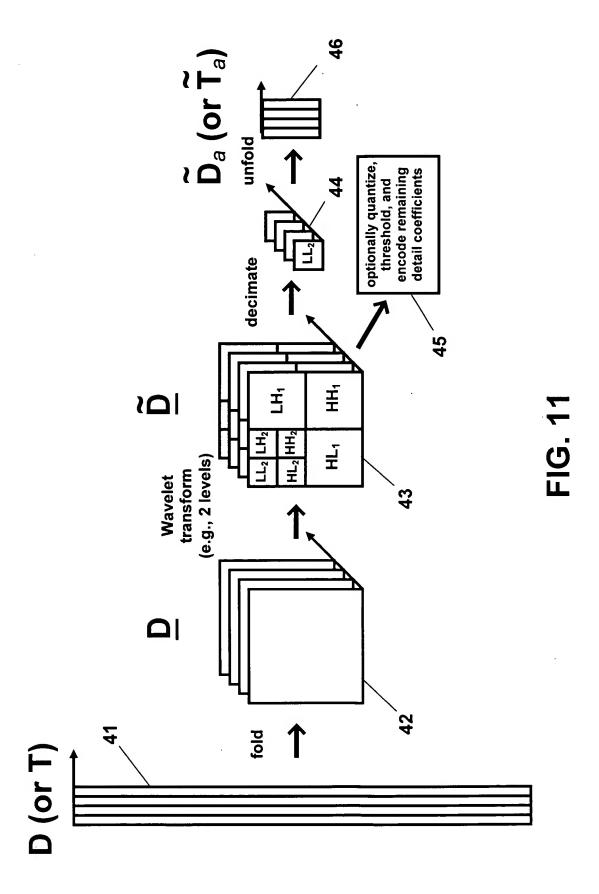


FIG. 9/





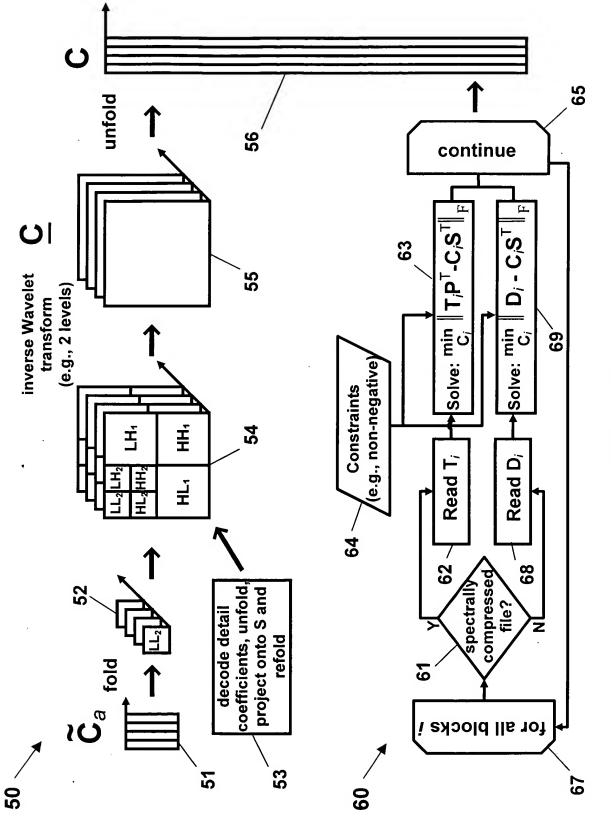
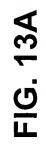
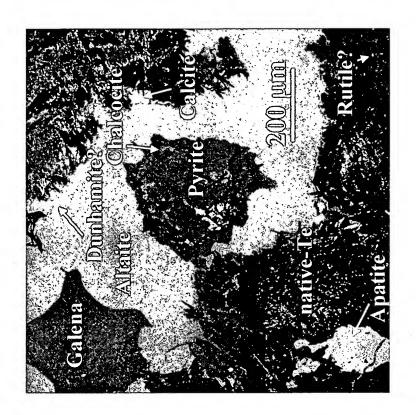
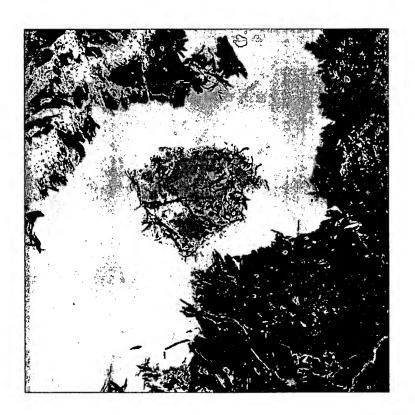
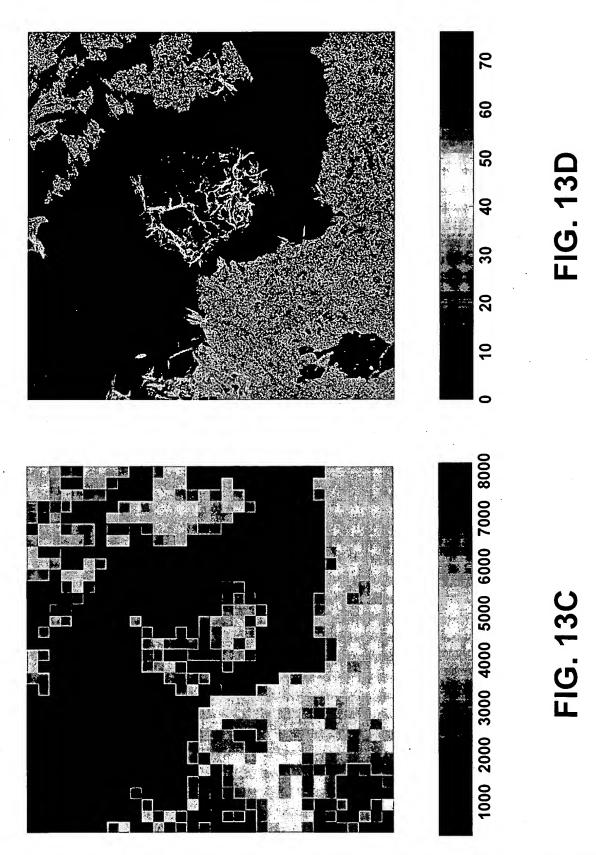


FIG. 12









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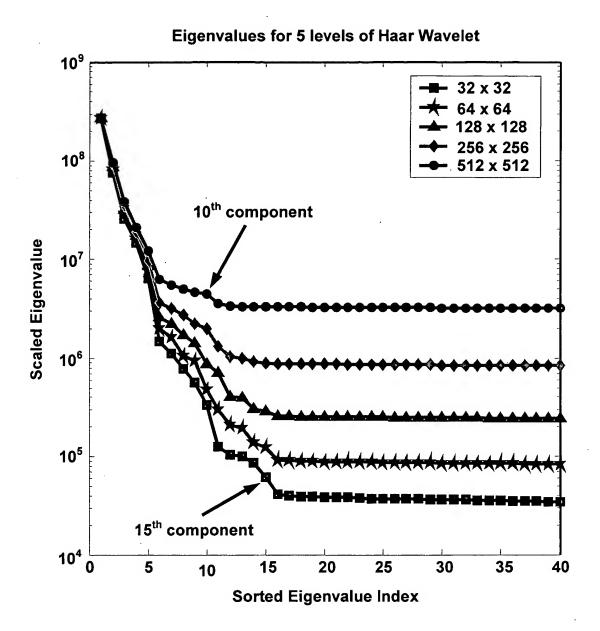


FIG. 14

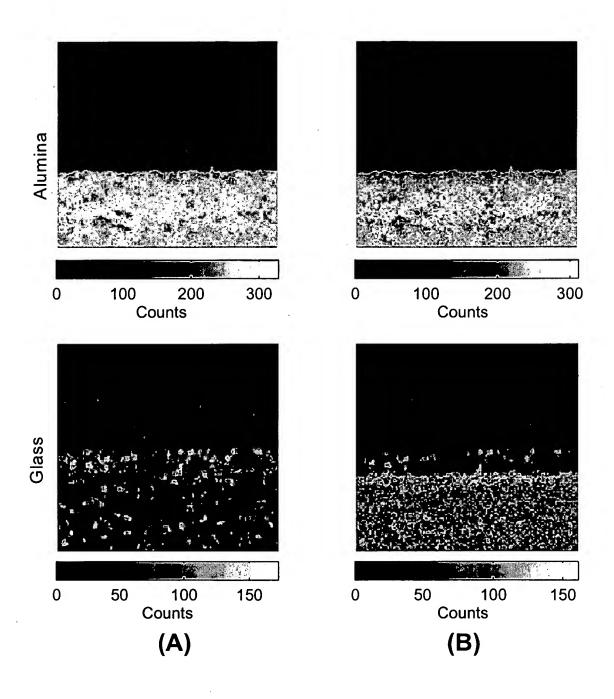


FIG. 15

BEST AVAILABLE COPY